IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: TING et al.

Serial No.:	10/604,450	Art Unit:	2166
Filed:	July 22, 2003	Examiner:	AHLUWALIA, Navneet K.
Title:	*Isolated Ordered Regions (IOR) Node Order*		

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This pre-appeal brief request is in response to the Examiner's Office action dated July 27, 2006. Reconsideration of this application is respectfully requested in view of the remarks that follow.

Claims 1-7, 9-17, and 19-20 are rejected under 35 U.S.C. §102(e) as being anticipated by Ferrari et al. (U.S. 2003/0097357). To be properly rejected under 35 U.S.C. §102(e), the cited reference must provide for each and every feature of the rejected claims. Applicants contend that the Ferrari reference fails to teach many of the features of the pending claims.

With respect to Applicants' pending independent claim 1, on page 3 of the Office Action dated July 27, 2006, the Examiner erroneously contends that "Ferrari teaches the <u>node generator</u> in figures 14A, B and C where <u>information of a document</u> is converted into ordered nodes (attributes and values) in a tree structure according to relationships amongst them". The Examiner appears to erroneously conclude that elements 112 and 114 can be equated to "nodes". By Ferrari's own admission in paragraph 96, elements 112 and 114 are NOT nodes, but merely correspond to "attributes" and "values", respectively, of a "taxonomy definition process". In

paragraph 90 Ferrari further clarifies that "taxonomy definition is the process of identifying the relevant attributes to _characterize documents_" and "classification is the process of associating _terms with documents_" (emphasis added).

The Examiner also appears to erroneously conclude that elements 112 and 114 are created when "information of a document is converted into ordered nodes." However, Ferrari, in paragraph 91, contradicts the Examiner by clarifying that the structure shown in Figures 14A-C is formed as a result of the above-mentioned "taxonomy definition process" wherein "collections of documents" are arranged into domains, and NOT formed, as the Examiner asserts, by converting a document into ordered nodes. In other words, the taxonomy of attributes/values is created based on data obtained from collections of documents, and NOT based on "parsing said entities in said document". Ferrari further clarifies in paragraph 100 that the data is acquired from a "collection of documents" in a database and the "collected documents are formatted and parsed to facilitate further processing." Further in the same paragraph, Ferrari states that the "formatted and parsed documents are processed in order to automatically _associate documents with terms_." Applicants assert that Ferrari merely teaches associating a collection of documents with terms in a pre-existing hierarchy, which is NOT the same as parsing entities in a document and _creating_ a plurality of nodes that represent entities and relationships that exists among said entities. Hence, Applicants respectfully assert that the Ferrari reference fails to teach or suggest the features of pending independent claim 1.

With respect to Applicants' pending independent claim 1, on pages 3 and 4 of Office Action dated July 27, 2006, the Examiner erroneously contends that "Ferrari teaches the grouping of nodes in Figure 17 where the information of a document is grouped into nodes according to attributes and values". Applicants wish to emphasize that Applicants' "node grouper" feature groups the created plurality of nodes (created from parsing a document) into a plurality of

regions, with each region defining an area within an n-dimensional space with n>1. By contrast, Ferrari in figure 17 merely re-emphasizes how a "collection of documents" (see element **222** which specifically mentions a collection of documents - **DOCS #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, and #11**) are associated with various attributes. For example, in figure 17 "**DOCS #1, #4**" are associated with the attribute "**RED SOUTH AMERICA**" and "**DOC #4**" is associated with the attribute "**RED CHILE**". It is clear that elements of Ferrari's figure 17 represent attributes that are associated with a plurality of documents in a collection and NOT nodes representing entities in one document. Further, there is no teaching in Ferrari's figure 17 for grouping nodes, as by Ferrari's own admission it groups documents NOT nodes representing entities in a document. It should be emphasized that by the Examiner's own admission on page 4 of Office Action dated July 27, 2006, Ferrari's paragraphs 91 and 103 merely disclose natural grouping of documents into domains and grouping of sub-collection of documents stored together to be retrieved at one time NOT grouping of nodes representing entities in one document. Hence, Applicants respectfully assert that the Ferrari reference fails to teach or suggest the features of pending independent claim 1.

With respect to Applicants' pending independent claim 1, on page 4 of office action dated 07/27/2006, the Examiner further contends that "Ferrari teaches the formatting of materials and documents within the knowledge base". Applicants respectfully assert that Applicants' formatter does NOT format "materials and documents", as the Examiner asserts, but formats a "plurality of regions for storage" where each of regions corresponds to a grouping of nodes in an n-dimensional space. Furthermore, on page 4 of office action dated July 27, 2006, the Examiner contends that "the classification and value formats associate the items in the collection as disclosed in paragraph 21". The Examiner appears to erroneously conclude that the "Attribute:Value format" can be equated to Applicants' formatter of claim 1. By Ferrari's own

admission in paragraph 90 "taxonomy definition" is the process of identifying the relevant attributes to <u>characterize documents</u>, determining the acceptable values of those attributes, and defining partial order among <u>terms (attribute-value pairs)</u> and "classification" is the process of associating <u>terms (attribute-value pairs)</u> with <u>documents</u>. The <u>attribute-value pairs</u> in the Ferrari reference are used for the <u>purpose of classifying documents</u> and these attribute-value pairs are represented in "Attribute:Value format", for example, Products:Movies and Director:Spike Lee. The "Attribute:Value format" of the Ferrari reference is <u>NOT</u> the same as the <u>"formatter"</u> of Applicants' pending independent claim 1, which <u>formats plurality of regions of a document for storage</u>. Hence, Applicants respectfully assert that the Ferrari reference fails to teach or suggest the features of pending independent claim 1.

Hence, based on the arguments provided above, Applicants contend that the Ferrari reference fails to provide for many of the features of Applicants' pending independent claim 1. Furthermore, independent claim 11 of Applicants' pending claims provides for similar features as independent claim 1. Hence, the arguments provided above with respect to claim 1 apply to the features of independent claim 11 and Applicants contend that the Ferrari reference fails to provide for many of the features of Applicants' pending independent claim 11.

The above-mentioned arguments with respect to independent claims 1 and 11, substantially apply to pending dependent claims 2-7, 9, 10, 12-17 and 19-20 as they inherit all the features of the claim from which they depend. Hence, Applicants' respectfully assert that pending dependent claims 2-7, 9, 10, 12-17 and 19-20 are allowable.
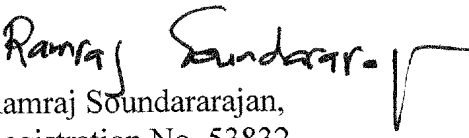
Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrari et al. (U.S. 2003/0097357) in view of Tip et al. (U.S. 2003/0018603). Arguments presented on pages 14 and 15 of Applicants' previous response filed April 25, 2006, substantially address this rejection and are hereby made the subject of this pre-appeal brief request for review.

Furthermore, claims 8 and 18 of the Applicants' pending claims depend from independent claims 1 and 11. Hence, the above-mentioned arguments with respect to independent claims 1 and 11, substantially apply to dependent claims 8 and 18 as they inherit all the features of the claim from which they depend. Hence, Applicants' respectfully assert that pending dependent claims 8 and 18 are allowable.

This request has been timely filed within the set period of response, no petition for extension of time or associated fee is required. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided to Deposit Account No. 09-0460.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact Applicants' representative at the below number.

Respectfully submitted,

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October 26, 2006